

REMARKS

The Office Action mailed June 28, 2004 has been received and reviewed. Claims 1-27 are in the case. Claims 1-27 stand rejected under 35 U.S.C. §102(b).

For the reasons set forth below, claims 1-27 are believed to be in condition for immediate allowance. Favorable reconsideration of the application in view of the following remarks is, therefore, respectfully requested.

Objection to the Drawings

The Office Action objects to the drawings asserting that reference character "52" has not been used in compliance with 37 CFR 1.84(p)(4). Specifically, the Office Action objects to "52" being "used to designate both an individual node and a group of nodes."

Applicant asserts that the drawings are proper in their current form. The rule in question, 37 CFR 1.84(p)(4), states in relevant part that "...the same reference character must never be used to designate different parts." Applicant's use of "52" is in compliance with this rule because it is never used to designate different parts.

The Office Action's characterization of "an individual node and a group of nodes" as two separate parts is misleading. As used by Applicant, reference character "52" is always used to designate one or more external nodes connected through a network to the primary node (node 11) that forms the basis of the invention. An individual node and a group of nodes both fit within this overall

umbrella of one or more external nodes. They are not different parts. Rather, they are different possible manifestations of the same thing.

Moreover, amending the drawings as suggested by the Office Action would introduce more confusion than it would prevent. Using one reference character to refer to one external node and another to refer to several external nodes would mislead a reader to believe there is a difference between the two. In reality, there is not. As stated hereinabove, they are different possible manifestations of the same thing. Only by using a common reference character can this meaning be properly communicated. Accordingly, Applicant respectfully requests that the objection to the drawings be withdrawn.

Rejection of Claims 1-27 Under 35 U.S.C. §102(b)

Claims 1-27 stand rejected under 35 U.S.C. §102(b) as being anticipated by Nakamura. For a prior art reference to anticipate, every element of the claimed invention must be identically disclosed in a single prior art reference. Moreover, those elements must be arranged or connected together in a single reference in the same way as specified in the patent claim. Applicant asserts that a rejection of anticipation based on Nakamura is improper because Nakamura fails to disclose all of the elements required by Applicant.

For example, with respect to claims 1 and 10, Applicant finds no mention in Nakamura of the function or structure of "a reporting module configured to query a network infrastructure device," as required by Applicant. Applicant has consistently defined a "network infrastructure device" as

“switches, routers, hubs, and the like.” (Applicant’s Spec. page 13, lines 15-16.) Applicant finds no mention in Nakamura of anything querying such devices.

In contrast, Nakamura discloses “a requesting unit, for querying another **electronic apparatus** connected to a bus network....” (Nakamura column 2, lines 46-47.) While Nakamura neither defines “electronic apparatus” nor uses the term outside of the “Summary of the Invention,” analysis of the context indicates Nakamura uses “electronic apparatus” and “node” interchangeably. Fortunately, Nakamura does define what is meant by a “node.” A node refers to “a device such as a personal computer, digital video tape recorder, digital video disc player, digital camera, hard disk, and monitor. (Nakamura column 5, lines 11-15.) Accordingly, for Nakamura, querying an “electronic apparatus” means querying a personal computer, digital tape recorder, etc., an active device connected to the network, not the network infrastructure.

As may be appreciated, personal computers, digital video tape recorders, etc. are not switches, routers, hubs, and the like. Accordingly, a disclosure of querying Nakamura’s “electronic apparatus” does not anticipate querying a “network infrastructure device” such as a switch, router, hub, etc. as required by Applicant.

Furthermore, Applicant finds no mention in Nakamura of the function or structure of “a correlation module configured to associate the end point connection information corresponding to the first network device to a location identifier corresponding to a physical location,” as required by Applicant. A correlation module as recited by Applicant maps network information (end point connection information) to physical information. For example, end point connection information may

include something like "port 1 of router R1." An example of a "location identifier" as claimed is something that contains information like "port 1 of router R1 connects to office 201." The "correlation module" then associates the end point connection information and the location identifier. From that association it learns that any device relaying "port 1 of router R1" is located in office 201.

The Office Action asserts that Nakamura discloses such function and structure in column 2, lines 44-56. Applicant finds no such disclosure in the cited paragraphs. To the contrary, the "control unit" disclosed in the cited paragraphs simply displays "inherent information," which includes position information specifically identifying the location of the queried apparatus. (Nakamura column 2, lines 44-56.) Rather than forming an association relying on infrastructure topology, Nakamura merely writes position information "...in a memory of the electronic apparatus" itself. (Nakamura column 2, lines 27-28.) That is, Nakamura does not have a correlation module to match end point connection information (*i.e.* network topology) with physical location (*i.e.* geography), as required by Applicant. Instead, Nakamura preprograms each device to regurgitate its physical location information when asked.

To further illustrate, a PC utilizing Applicant's claimed invention may be moved to a new office. When connected to the network in the new office, a reporting module loaded on the PC may query the network to ask for the PC's end point connection information. The network infrastructure may respond with something like "port 5 on router R10." A correlation module may then form an association and learn that the PC is in office 510.

Network infrastructure is installed and not typically subject to major or frequent modification thereafter. Network apparatus (*i.e.* nodes) are regularly and frequently (sometimes daily) moved for a

variety of reasons. Thus, using the invention of Nakamura, a PC would save a file or register containing something like "PC in office 201." Accordingly, if the PC were moved to office 510, the content of its location file or register would continue to inform any entity asking that it was "PC in office 201." That is, using the invention of Nakamura, the file or register on the PC would have to be reprogrammed each time it is moved. As may be appreciated, Applicant's claimed invention, which does not require additional programming, relies only on infrastructure, which does not change frequently. This virtually automatic ability to locate any frequently re-located device immediately upon connection to the network anywhere may be very valuable, particularly in networks connecting tens, hundreds, or even thousands of devices. Reconsideration is respectfully requested.

With respect to claims 2 and 11, Applicant finds no mention in Nakamura of end point connection information comprising a port number of the network infrastructure device. Placed in the proper context of claim 1, end point connection information is the response given by a network infrastructure device when queried by a reporting module. As stated hereinabove, Applicant finds no disclosure in Nakamura of a network infrastructure device being queried. Moreover, Applicant finds no disclosure in Nakamura of anything giving a port number in response to a query. Reconsideration is respectfully requested.

With respect to claims 3 and 12, as recited, end point connection information is the response given by a network infrastructure device when queried by a reporting module. Applicant finds no mention in Nakamura of transmitting such information to a database. Reconsideration is respectfully requested.

With respect to claims 4 and 13, Applicant finds no mention in Nakamura of the function or structure of an update module detecting a change in end point connection information, as required by Applicant. End point connection information is the response given by a network infrastructure device when queried by a reporting module. While Nakamura may detect changes in the connection configuration by noting any "change in the bias voltage that is applied to a communication port of each node" (Nakamura column 9, lines 60-63), changes in bias voltage and changes in query response are two separate things. Reconsideration is respectfully requested.

With respect to claims 5 and 14, Applicant finds no mention in Nakamura of the function or structure of an inventory module configured to detect a second network device local to the first network device and obtain end point connection information corresponding to the second network device, as required by Applicant. Nakamura's disclosure that "each node declares the parent-child relationship through their communication ports" (Nakamura column 10, lines 51-53) is insufficient to anticipate the recited limitations. Reconsideration is respectfully requested.

With respect to claims 6 and 15, the Office Action asserts it is inherent that the apparatus of Nakamura comprises a monitor configured to receive end point connection information from the reporting module. However, as explained hereinabove, Nakamura does not disclose querying a network infrastructure device to obtain end point connection information. Accordingly, Nakamura cannot inherently disclose a monitor receiving information Nakamura does not contemplate generating. Reconsideration is respectfully requested.

With respect to claims 7 and 16, as explained hereinabove, Nakamura discloses neither the function or structure of "a requesting unit, for querying another electronic apparatus..." nor the function or structure of "a correlation module configured to associate the end point connection information corresponding to the first network device to a location identifier corresponding to a physical location," as required by Applicant. Reconsideration is respectfully requested.

With respect to claims 8, 9, 17, and 18, the Office Action asserts that Nakamura discloses an inventory module to transmit software and hardware configuration information. In support of this assertion, the Office Action cites Nakamura column 2, lines 5-13. However, Nakamura column 2, lines 5-13 only discloses storing and transmitting "position information specifically identifying the location of the electrical apparatus." Transmitting "position information" does not anticipate transmitting software configuration information, as required by Applicant. Reconsideration is respectfully requested.

With respect to claim 19, as explained hereinabove, Nakamura does not disclose "querying a network infrastructure device," as required by Applicant. Instead, Nakamura discloses querying personal computers, digital video recorders, etc. Such devices are not network infrastructure devices as defined by Applicant.

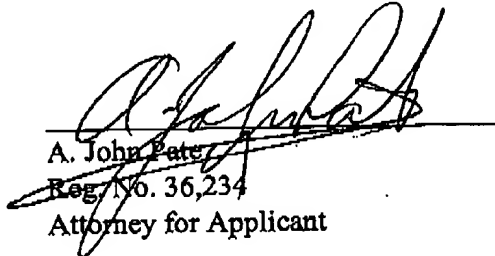
Moreover, as explained hereinabove, Applicant finds no mention in Nakamura of "associating the end point connection information corresponding to the first network device to a location identifier corresponding to a physical location," as required by Applicant. Instead, Nakamura programs the location information directly into the various devices connected to the network. Reconsideration is respectfully requested.

With respect to claims 20-27, for the reasons set forth hereinabove, Applicant asserts that the claims are not anticipated because Nakamura fails to disclose all of Applicant's recited elements. Reconsideration is respectfully requested.

In the event that the examiner finds any remaining impediment to the prompt allowance of any of these claims, which could be clarified in a telephone conference, the examiner is respectfully urged to initiate the same with the undersigned.

DATED this 27th day of September, 2004.

Respectfully submitted,


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